

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions and listings of the claims in the application.

Listing of Claims

1-28. (Canceled)

29. (Currently amended) A cell suspension produced according to a method comprising the steps of:

(a) physically and/or chemically dissociating cellular stratum in a split or full thickness skin tissue sample obtained from a patient ~~to provide cells suitable for grafting to the patient,~~ wherein the skin tissue sample comprises ~~dermis, epidermis,~~ a dermal surface, an epidermal surface, and a dermal-epidermal junction therebetween;

(b) harvesting cells from the ~~dermis and the epidermis~~ dermal surface at the dermal-epidermal junction, and from the epidermal surface at the dermal-epidermal junction,

wherein the cells are harvested in the presence of a nutrient solution that is free of serum xenogenic to said patient,

wherein the harvested cells comprises keratinocyte basal cells and melanocytes harvested from the epidermal surface, and fibroblasts harvested from the dermal surface,

the harvested cells having the potential to include cellular congregates; and

(c) filtering the harvested cells in the nutrient solution to remove cellular congregates greater than 200 $[[\mu\text{M}]] \mu\text{m}$,

wherein the resulting cell suspension is free of cellular congregates greater than 200 μm , and comprises keratinocyte basal cells, melanocytes, and fibroblasts autologous to the patient in the nutrient solution that is free of serum xenogenic to said patient, and free of cellular congregates greater than 200 μm , and

wherein the resulting cell suspension comprises ~~a composition of viable cells autologous to said patient, and wherein said composition has~~ a cell population comprising keratinocyte basal cells, melanocytes, and fibroblasts, wherein the ratios of keratinocyte basal cells to melanocytes, keratinocyte basal cells to fibroblasts, and melanocytes to fibroblasts in the cell population is comparable to the ratio of such cell types in situ within the dermal-epidermal

~~junction from which the viable cells were harvested, the cell population of the composition and the skin tissue sample being comparable.~~

30-33. (Canceled)

34. (Withdrawn) A cell suspension according to claim 29, the suspension being distributed on a patient tissue site undergoing tissue grafting.

35. (Withdrawn) A cell suspension according to claim 29 comprising the further step of:

(d) administering the suspension directly to a region on the patient that requires a cell graft.

36. (Withdrawn) A cell suspension according to claim 35 wherein the tissue sample is obtained from the patient that requires a cell graft.

37. (Withdrawn) A cell suspension according to claim 35 wherein the cell suspension is distributed relatively evenly over the graft region.

38. (Withdrawn) A cell suspension according to claim 35 wherein the cell suspension is obtained perioperatively.

39. (Withdrawn) A cell suspension according to claim 35 wherein the cell suspension contains cells present in a ratio to each other comparable to those in the donor sample.

40. (Withdrawn) A cell suspension according to claim 39 wherein the cells include keratinocyte basal cells, Langerhans cells, fibroblasts and melanocytes.

41. (Withdrawn) A suspension according to claim 40 wherein the cells are substantially viable.

42. (Withdrawn) A cell suspension according to claim 37 wherein the cell suspension is sprayed, spread, pipetted, or painted onto the tissue site.

43. (Withdrawn) A cell suspension according to claim 35 wherein the cell suspension is obtained perioperatively from a tissue sample for the patient that requires a cell graft, contains cells present in a ratio to each other comparable to those seen in the donor sample, and is sprayed, spread, pipetted, or painted onto the tissue site to provide an even distribution over the graft region.

44. (Withdrawn) A cell suspension produced according to a method comprising the steps of:

- (a) obtaining a tissue sample from a site on a donor in need of a tissue graft;
- (b) physically and/or chemically dissociating and removing cellular stratum from cells present in the sample;
- (c) harvesting the cells in the presence of a nutrient solution;
- (d) distributing the suspension on a site of the donor as an autologous tissue graft.

45. (Withdrawn) A suspension according to claim 44 wherein the suspension is substantially free of cell conglomerates.

46. (Withdrawn) A suspension according to claim 44 wherein the suspension is substantially free of xenogenic serum.

47. (Withdrawn) A cell suspension according to claim 44 wherein the cell suspension is distributed relatively evenly over the graft region.

48. (Withdrawn) A cell suspension according to claim 47 wherein the cell suspension is obtained perioperatively.

49. (Withdrawn) A cell suspension according to claim 44 wherein the cell suspension contains cells represent in a ratio to each other comparable to those seen in the donor sample.

50. (Withdrawn) A suspension according to claim 49 wherein the cells comprise keratinocyte basal cells, Langerhans cells, fibroblasts and melanocytes.

51. (Withdrawn) A suspension according to claim 50 wherein the cells are substantially viable.

52. (Withdrawn) A cell suspension according to claim 47 wherein the cell suspension is sprayed, spread, pipetted, or painted on to the tissue site.

53. (Withdrawn) A cell suspension according to claim 44 wherein the cell suspension is obtained perioperatively, contains cells present in a ratio to each other comparable to those seen in the donor sample, and is sprayed, spread, pipetted, or painted onto the tissue site to provide an even distribution over the graft region.

54. (Withdrawn) A cell suspension produced by a method comprising obtaining cells from a patient in need of a tissue graft, providing the cells in nutrient solution in a manner that is substantially free of cellular stratum, xenogenic serum, and cell conglomerates, the suspension being distributed in apposition to the site of the recipient as a tissue graft.

55. (Withdrawn) A suspension according to claim 54 wherein the suspension is distributed relatively evenly over the graft region.

56. (Withdrawn) A cell suspension according to claim 54 wherein the cell suspension is obtained perioperatively.

57. (Withdrawn) A cell suspension according to claim 54 wherein the cell suspension contains cells present in a ratio to each other comparable to those seen in the donor sample.

58. (Withdrawn) A suspension according to claim 57 wherein the cells comprise keratinocyte basal cells, Langerhans cells, fibroblasts and melanocytes.

59. (Withdrawn) A suspension according to claim 58 wherein the cells are substantially viable.

60. (Withdrawn) A cell suspension according to claim 55 wherein the cell suspension is sprayed, spread, pipetted, or painted onto the tissue site.

61. (Currently amended) A cell suspension comprising cells harvested from a split or full thickness skin tissue sample obtained from a patient, wherein the skin tissue sample comprises ~~dermis, epidermis,~~ a dermal surface, an epidermal surface, and a dermal-epidermal junction therebetween, the cell suspension comprising:

(a) ~~a composition of~~ viable cells harvested from the ~~dermis and the epidermis~~ dermal surface at the dermal-epidermal junction and from the epidermal surface at the dermal-epidermal junction of said skin tissue sample and autologous to said patient, ~~wherein said composition having a cell population~~ viable cells include keratinocyte basal cells, fibroblasts and melanocytes; and wherein the ratios of each cell type to each other cell type in the cell suspension is comparable to the ratios of such cell types in situ within the dermal-epidermal junction of the skin tissue sample ~~the cell population of the composition and the skin tissue sample being comparable;~~ and

(b) a nutrient solution free of serum xenogenic to the patient,
wherein said cell suspension is free of cellular congregates greater than 200µm.

62. (Withdrawn) A suspension according to claim 61 wherein the suspension is distributed relatively evenly over the graft region.

63. (Previously presented) A cell suspension according to claim 61 wherein the cell suspension is obtained perioperatively.

64. (Canceled)

65. (Currently amended) A suspension according to claim 61 wherein said ~~composition of cells~~ cell suspension comprises keratinocyte basal cells, Langerhans cells, fibroblasts and melanocytes.

66. (Canceled)

67. (Withdrawn) A cell suspension according to claim 62, wherein the cell suspension is sprayed, spread pipetted, or painted onto the tissue site.

68. (Withdrawn) A cell suspension produced by a method sufficient to provide the cells in nutrient solution, substantially free of cellular stratum, xenogenic serum, and cell conglomerates, the suspension serving as a graft in apposition to the body of a recipient in need of a tissue graft.

69. (Withdrawn) A suspension according to claim 68 wherein the suspension is distributed relatively evenly over the graft region.

70. (Withdrawn) A cell suspension according to claim 69 wherein the cell suspension is obtained perioperatively.

71. (Withdrawn) A cell suspension according to claim 69 wherein the cell suspension contains cells present in a ratio to each other comparable to those seen in the donor sample.

72. (Withdrawn) A suspension according to claim 71 wherein the cells comprise keratinocyte basal cells, Langerhans cells, fibroblasts and melanocytes.

73. (Withdrawn) A suspension according to claim 72 wherein the cells are substantially viable.

74. (Withdrawn) A cell suspension according to claim 69 wherein the cell suspension is sprayed, spread, pipetted, or painted onto the tissue site.

75. (Currently amended) A cell suspension according to claim 61, wherein the skin tissue sample is subjected to a solution comprising an enzyme before the viable cells are harvested~~in a method using a solution comprising an enzyme.~~

76. (Previously presented) A cell suspension according to claim 75 wherein the enzyme is selected from the group consisting of trypsin, trypsin-EDTA, dispase, collagenase, thermolysin, pronase, hyaluronidase, pancreatin, elastase, and papain.

77. (Previously presented) A cell suspension according to claim 76 wherein the enzyme is trypsin.

78. (Previously presented) A cell suspension according to claim 77 wherein the trypsin is present in the solution in an amount that is between 5 and 0.1% per volume of the solution.

79. (Previously presented) A cell suspension according to claim 77 wherein the trypsin is present in the solution in an amount that is less than 0.05% per volume of the solution.

80. (New) A cell suspension according to claim 61 wherein the viable cells are from a surface of the dermis and a surface of the epidermis within the dermal-epidermal junction.

81. (New) A cell suspension according to claim 61 wherein the nutrient solution comprises a physiological saline.

82. (New) A cell suspension according to claim 29 wherein harvesting comprises scraping cells from a surface of the dermis and a surface of the epidermis within the dermal-epidermal junction.

83. (New) A cell suspension according to claim 29 wherein the nutrient solution comprises a physiological saline.

84. (New) A cell suspension according to claim 29, wherein dissociating cellular stratum comprises subjecting the skin tissue sample to a solution comprising an enzyme.

85. (New) A cell suspension according to claim 84, wherein the enzyme is trypsin.

86. (New) A cell suspension according to claim 85, wherein said trypsin is present in the solution in an amount that is between 5 and 0.1% per volume of the solution, for between about 10 minutes and about 30 minutes.

87. (New) A cell suspension according to claim 86, wherein the skin tissue sample is removed from the solution comprising said trypsin or said trypsin is substantially diluted, before harvesting said cells from the dermis and the epidermis within the dermal-epidermal junction of the skin tissue sample.

88. (New) A cell suspension according to claim 87, wherein said trypsin is diluted to less than 0.05% per volume of the solution.

89. (New) A cell suspension according to claim 61, wherein the cell suspension is free of cellular congregates greater than 100 μm